

EXHIBIT - ABCO AGREEMENT

South Carolina Department of Health and Environmental Control

2600 Bull Street
Columbia, S.C. 29201

Commissioner
Michael D. Jarrett



Board

Moses H Clarkson, Jr., Chairman
Gerald A. Kaynard, Vice-Chairman
Oren L. Brady, Jr., Secretary
Barbara P. Nuessele
James A. Spruill, Jr.
William H. Hester, M.D.
Euta M. Colvin, M.D.

July 29, 1987

CERTIFIED MAIL

RECEIVED

JUL 31 1987

S. C. DEPT. OF HEALTH AND
ENVIRONMENTAL CONTROL
Bureau of Solid & Hazardous
Waste Management

Mr. Ralph Mellom
Ogletree, Deakins, Nash, Smoak & Stewart
1000 East North
PO Box 2757
Greenville, SC 29602

RE: ABCO Industries, Inc.

Dear Mr. Mellom:

Enclosed herewith is the original of the proposed agreement regarding the "solid waste management units" at ABCO. Please review and if the terms are acceptable, sign the document and have your client do the same. Then return to my attention as soon as possible.

Also, enclosed is a copy of Mr. Strickland's approval of the July 8, 1987 submittal entitled "ABCO Industries, LTD Solid Waste Management Units Remedial Action Plan" as we agreed to provide to ABCO on or before July 31, 1987.

Should you have questions concerning this or other matters, please do not hesitate to call by dialing 734-5200.

Sincerely,

Lewis R. Bodenbaugh, Director
Division of Facility Compliance
Bureau of Solid and Hazardous
Waste Management

LRB/trh

Enclosures

cc: Steve Strickland
Hartrell W. Truesdale
Melissa Johnston
Bill Buffington

South Carolina Department of Health and Environmental Control

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Euta M. Colvin, M.D.

July 29, 1987

Mr. Edward Page
ABCO Industries
P. O. Box 335
Roebuck, S.C. 29376

RE: SWMU Remedial Action Plan Approval
SCD 003 360 393

Dear Mr. Page:

The Department has reviewed the Solid Waste Management Unit Remedial Action Plan dated July 8, 1987 and hereby approves the plan as written. The submittal of your revised closure plan for the units will be due within thirty (30) days of the signing of the agreement. If you have any questions, please contact me at 734-5173.

Sincerely,

A handwritten signature in black ink, appearing to read "S G Strickland".

Steven G. Strickland
Eastern Facility Engineering Section
Bureau of Solid and Hazardous Waste
Management

SGS:jth

cc: Lewis Bedenbaugh
John Deal, US EPA

THE STATE OF SOUTH CAROLINA
BEFORE THE DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

IN RE: ABCO INDUSTRIES, INC.

AGREEMENT

WHEREAS, the United States Environmental Protection Agency (EPA) has requested that the South Carolina Department of Health and Environmental Control (DHEC) formalize an agreement between DHEC and ABCO Industries, Inc. (ABCO) to address certain waste management activities at ABCO; and,

WHEREAS, these activities were considered to meet the regulatory definition of solid waste management units in accordance with R.61-79.264.101 of the South Carolina Hazardous Waste Management Regulations (and the antecedent federal regulations) promulgated pursuant to Section 44-56-30 of the South Carolina Hazardous Waste Management Act, 1976 Code of Laws of South Carolina, as amended, at the point ABCO was seeking a hazardous waste permit; and,

WHEREAS, ABCO has sold ownership of the hazardous waste management units for which it would have sought a permit if it were to continue to operate the same; and,

WHEREAS, DHEC and EPA have established certain procedural and substantive requirements in R.61-79.264.101 of said regulations for addressing solid waste management units which are appropriate at locations which are not currently seeking a permit but which have at sometime sought a permit; and,

WHEREAS, DHEC is authorized under Section 44-56-40(1), 1976 Code of Laws of South Carolina, as amended, to enter into agreements with organizations or individuals in order to accomplish the purposes of the South Carolina Hazardous Waste Management Act; and,

WHEREAS, DHEC and ABCO consider the following agreement to meet both parties' interests in instituting appropriate corrective action measures at these solid waste management units; and,

WHEREAS, ABCO, in signing this Agreement, does not waive any rights or defenses it may have under any statutes or regulations; In addition, ABCO neither admits nor denies any of the facts or determinations made by DHEC or EPA in, or leading up to, this Agreement; and,

WHEREAS, ABCO has proposed to institute such measures as described in the attachment affixed hereto entitled ABCO Remedial Action Plan dated July 8, 1987.

NOW, THEREFORE IT IS HEREBY AGREED THAT:

On or before July 31, 1987, DHEC shall review and if deemed acceptable, approve of ABCO's Remedial Action Plan; and,

On or before August 14, 1987, ABCO shall implement said approved Remedial Action Plan in accordance with the schedules as found in Section F therein.

WE AGREE:

ABCO INDUSTRIES, LTD.

Bob Ellington

Date: Aug 19, 1987

Ralph M. Mellown

Date: August 24, 1987

THE SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Hartsill W. Truesdale Date: 7/23/87
Hartsill W. Truesdale, P.E., Chief
Bureau of Solid and Hazardous
Waste Management


Lewis R. Bedenbaugh, Director
Division of Facility Compliance
Bureau of Solid and Hazardous
Waste Management

Parikh Roberts, Jr. Date: JULY 27, 1987
Approved by: Legal Office

ABCO INDUSTRIES, LTD

SOLID WASTE MANAGEMENT UNITS
REMEDIAL ACTION PLAN

July 8, 1987

A. APPLICABILITY

A.1. The conditions of this agreement apply to the Solid Waste Management Units listed below and described in Appendix A:

1. Polymer wastewater surface impoundment #1
2. Polymer wastewater surface impoundment #2
3. Polymer wastewater surface impoundment #3
4. Wastewater surge pond (surface impoundment)
5. Wastewater treatment surface impoundment #1
(Equalization Basin)
6. Wastewater treatment surface impoundment #2
(Aeration Basin)
7. Clarifier
8. Wastewater filter
9. Sprayfield area
10. Sprayfield run-off surface impoundment (Woods pond)

A.2. Any additional solid waste management units discovered during the course of groundwater monitoring, field investigation, environmental audits, or other means.

A.3. ABCO shall utilize Appendix C for the submission summaries of the items required for the units identified under Conditions A.1. and A.2. above.

B. SWMU ASSESSMENT PLAN

B.1. ABCO shall notify the Department of any additional solid waste management unit(s) discovered during the course of groundwater monitoring, field investigations, environmental audits or other means within fifteen (15) days of discovery.

B.2. ABCO shall prepare a solid waste management unit assessment plan and a proposed schedule of implementation and completion for any additional solid waste management unit which is discovered subsequent to the issuance of this agreement and is not listed under Condition A.1. above, and is known or suspected to have releases of hazardous waste or releases of hazardous constituents to the environment. The plan shall

include methods and specific actions as necessary to determine whether a prior or continuing release of hazardous waste or hazardous constituents has occurred at each solid waste management unit. The plan must also include, at a minimum, the following information for each unit:

- (1) Type of unit
- (2) Location of each unit on a topographic map of appropriate scale
- (3) General dimensions and capacities
- (4) Function of unit
- (5) Dates that the unit was operated
- (6) Description of wastes that were placed in the unit
- (7) Description of any known releases of spills (to include groundwater data, soil analyses, and/or surface water data)

B.3. ABCO shall notify the Department of any release from a unit initially identified to be a unit of non-release within fifteen (15) days after the discovery.

C. SWMU INVESTIGATION PLAN

C.1. ABCO shall prepare a solid waste management unit investigation plan for those units identified under Condition A. and B., which includes schedules of implementation and completion of specific actions. The Permittee must provide documentation that a release is not probable if a unit identified under Condition B. is not included in the remedial investigation plan.

C.2. ABCO shall prepare a solid waste management unit investigation plan for any unit or units identified under Condition B.3. which includes schedules of implementation and completion of specific actions.

C.3. ABCO shall utilize Appendix B as guidance in preparation of SWMU Investigation Plan (Plan). The Plan shall be conducted in accordance with the approved Plan. ABCO shall provide written sufficient justification for any omissions of a unit from the Workplan. Such omissions are subject to the approval of the Department.

D. SWMU INVESTIGATION REPORTING REQUIREMENTS

D.1. Progress Reports

If the time required to complete the Plan is greater than 180 days, ABCO shall provide the Department with signed, quarterly progress reports (90 day intervals) beginning ninety (90) days from implementation of the approval plan containing:

- a. A description of the portion of the Plan completed;
- b. Summaries of findings;
- c. Summaries of all changes made in the Plan during the reporting period;
- d. Summaries of all problems or potential problems encountered during the reporting period;
- e. Projected work for the next reporting period; and
- f. Copies of daily reports, inspection reports, laboratory/monitoring data, etc.

D.2. Imminent Hazard Report

ABCO shall report any imminent or existing hazard to public health of the environment from the present or past release of hazardous constituents to the Department.

D.3. SWMU Investigation Plan Report

ABCO shall prepare a SWMU Investigation Plan Report (Report). The SWMU Investigation Plan Report shall be developed in draft form for Department review. The Report shall be developed in final format within thirty (30) days of receipt of comments on the Draft SWMU Remedial Report.

The Report shall include an analysis and summary of all facility investigations of solid waste management units and their results. The summary shall include a report on the type and extent of contamination at the facility, including sources and migration pathways, and a description of actual or potential receptors. The objective of this task shall be to ensure that the investigation data and implemented actions are sufficient in quality (e.g. quality assurance procedures have been followed) and quantity to describe the nature and extent of any remaining contamination, potential threat to human health and/or the

environment, and to support a Corrective Action Study, if necessary.

All reports must be signed and certified

Three (3) copies of all reports shall be provided by the Permittee to the Department at the following address:

Mr. Hartsill W. Truesdale, P.E., Chief
Bureau of Solid and Hazardous Waste Management
South Carolina Department of Health and
Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

E. Corrective Action Plan

E.1. The Department shall review the final reports on the remedial investigations conducted under Condition .C. and notify ABCO of the need for further investigative actions and/or the need for corrective action.

E.2. Upon determination that further corrective action is needed, ABCO shall submit to the Department, a corrective action plan in accordance with a schedule to be determined by the Department. The plan shall specify proposed corrective measures to be taken at each unit, a schedule of implementation and completion, and cost estimate for completion of corrective action.

E.3. If ABCO at any time determines that the solid waste management unit investigation or corrective action plans required under Conditions C. or E. no longer satisfy the requirements as initially agreed upon for prior or continuing releases of hazardous waste or hazardous constituents from solid waste management units, he must submit an amended plan(s) to the Department within ninety (90) days of such determination.

E.4. ABCO shall demonstrate financial responsibility to complete the corrective action required under the corrective action plans.

F. Schedules of Compliance

F.1. ABCO shall submit the Assessment Plan(s) required under Condition .B.2. to the Department within sixty (60) days of notification required under Condition B.1.

F.2. ABCO shall submit the Plan required by condition C.1. and the associated documentation to the Department within ninety (90) days after the effective date of the agreement.

F.3. ABCO shall submit the Investigation Plan(s) required under Condition C.2. within ninety (90) days of submission of the plan required under Condition B.2. and E.2.

F.4. All plans and schedules shall be subject to approval by the Department prior to implementation.

F.5. If the time required to complete any interim activity is more than 180 days, the schedule shall specify interim dates for the submission of reports of progress toward satisfaction of the interim requirements.

F.6. The results of all plans and reports shall be submitted in accordance with the approved schedule. Extensions of the due date for submittals may be granted by the Department based on ABCO's demonstration that sufficient justification for the extension exists.

APPENDIX A

Solid Waste Management Unit(s) Identification

APPENDIX A

ABCO INDUSTRIES, INC.

Solid Waste Management Units

Units #1 - 3

Polymer Wastewater Surface Impoundments - These units are unlined polymer wastewater surface impoundments that contain polymer and accumulate sludge from settling.

Unit #4

Wastewater surge pond - This unit receives the overflow from the polymer surface impoundments. This overflow consists of wastewaters that contain polymer.

Units #5 - 6

Wastewater (concrete) surface impoundments - These units receive "de minimus" losses. As noted, they have a concrete liner.

Unit #7

Clarifier - This unit receives wastewaters from units #5 and #6.

Unit #8

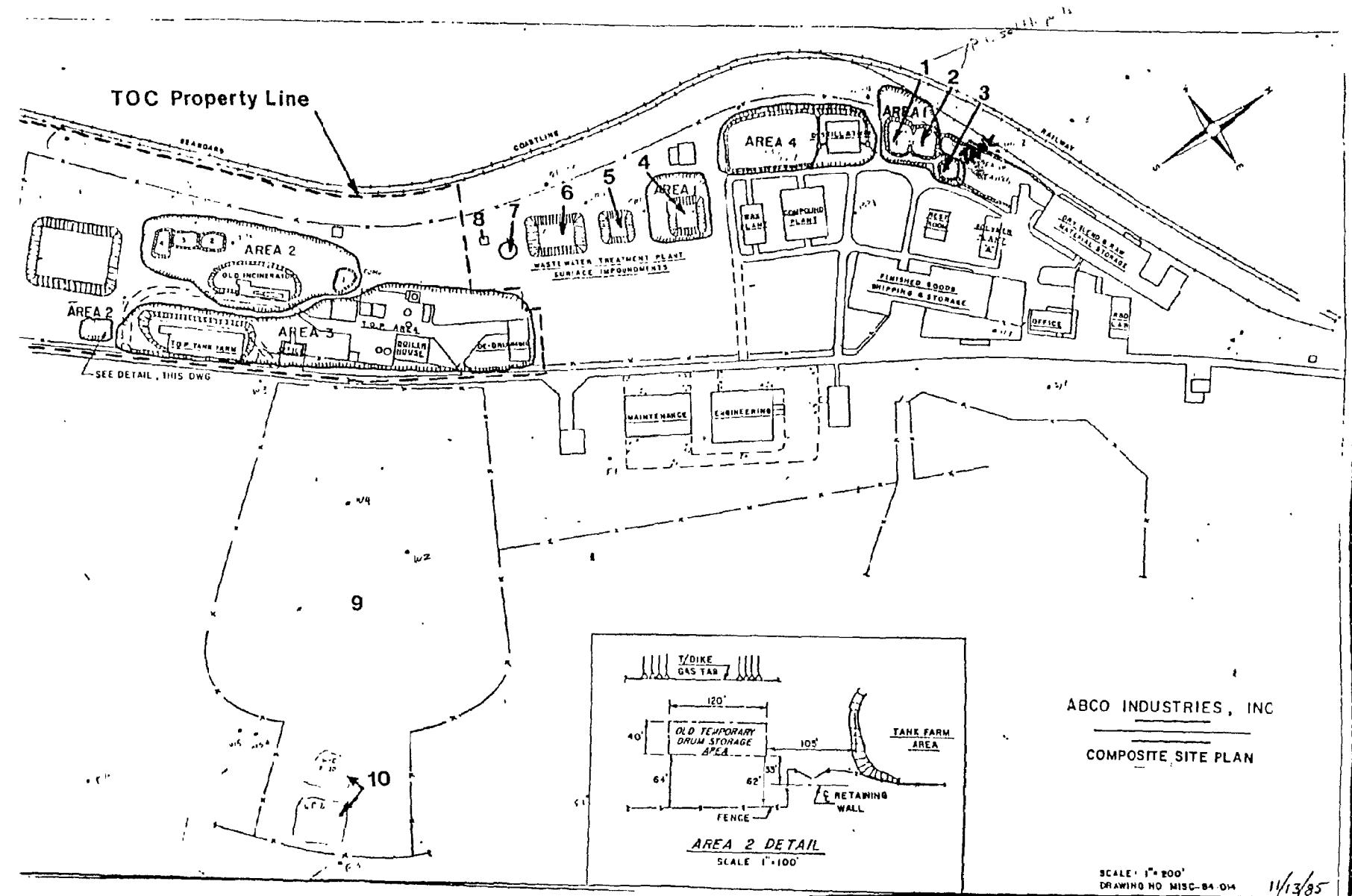
Wastewater filter - This unit receives wastewater from the Clarifier (unit #7) prior to the discharge to the NPDES discharge point.

Units #9 - 10

Sprayfield and the Sprayfield run-off pond - These units took treated effluent until the NPDES discharge permit was issued. The sprayfield ceased the receipt of wastewaters prior to RCRA. The pond was used to collect run-off and had no discharge point.

"NFA"

FIGURE A - SWMU LOCATIONS



APPENDIX B

Facility Investigation Outline

FACILITY INVESTIGATION PLANS

I. FI WORKPLAN REQUIREMENTS

The Permittee shall prepare a Facility Investigation (FI) Workplan developed in accordance with the requirements of Part II of this document. This Workplan shall also include the development of the following plans, which shall be prepared concurrently:

A. Project Management Plan

The Permittee shall prepare a Project Management Plan which will include a discussion of the technical approach, schedules, and personnel. The Project Management Plan will also include a description of qualifications of personnel performing or directing the RFI, including contractor personnel. This plan shall also document the overall management approach to the RCRA Facility Investigation.

B. Sampling and Analysis Plan

The Permittee shall prepare a plan to document all monitoring procedures: sampling, field measures and sample analysis performed during the investigation to characterize the environmental setting, source, and releases of hazardous constituents, so as to ensure that all information and data are valid and properly documented. -

1. Sampling/Field Measurements

The sampling section of the Sampling and Analysis Plan shall be in accordance with Characterization of Hazardous Waste Sites A Methods Manual: Volume II. Available Sampling Methods, EPA-600/4-83-040, and at a minimum discuss:

- a. Selecting appropriate sampling locations, depths, etc.;
- b. Obtaining all necessary ancillary data;
- c. Determining conditions under which sampling should be conducted;
- d. Determining which media are to be sampled (e.g., groundwater, air, soil, sediment, etc.);
- e. Determining which parameters are to be measured and where;

- f. Selecting the frequency of sampling and length of sampling period;
- g. Selecting the types of samples (e.g., composites vs. grabs) and number of samples to be collected.
- h. Documenting field sampling operations and procedures, including:
 - i) Documentation of procedures for preparation of reagents or supplies which become an integral part of the sample (e.g., filters, preservatives, and adsorbing reagents);
 - ii) Procedures and forms for recording the exact location and specific considerations associated with sample acquisition;
 - iii) Documentation of specific sample preservation method;
 - iv) Calibration of field instruments;
 - v) Submission of field-based blanks, where appropriate;
 - vi) Potential interferences present at the facility;
 - vii) Construction materials and techniques, associated with monitoring wells and piezometers;
 - viii) Field equipment listing and sampling containers;
 - ix) Sampling order; and
 - x) Decontamination procedures.
- i. Selecting appropriate sample containers;
- j. Sampling preservation; and
- k. Chain-of-custody, including:
 - i) Standardized field tracking reporting forms to establish sample custody in the field prior to shipment; and

- ii) Pre-prepared sample labels containing all information necessary for effective sample tracking.

2. Sample Analysis

Sample Analysis shall be conducted in accordance with SW-846: "Test Methods for Evaluating Solid Waste-Physical/Chemical Methods"

The sample analysis section of the Sampling and Analysis Plan shall specify the following:

- a. Chain-of-custody procedures, including:
 - i) Identification of a responsible party to act as sampling custodian at the laboratory facility authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;
 - ii) Provision for a laboratory sample custody log consisting of serially numbered standard lab-tracking report sheets; and
 - iii) Specification of laboratory sample custody procedures for sample handling, storage, and disbursement for analysis.
- b. Sample storage;
- c. Sample preparation methods;
- d. Analytical procedures, including:
 - i) Scope and application of the procedure;
 - ii) Sample matrix;
 - iii) Potential interferences;
 - iv) Precision and accuracy of the methodology; and
 - v) Method detection limits.
- e. Calibration procedures and frequency;
- f. Data reduction, validation and reporting; and

- g. Internal quality control checks, laboratory performance and systems audits and frequency, including:
 - i) Method blank(s);
 - ii) Laboratory control sample(s);
 - iii) Calibration check sample(s);
 - iv) Replicate sample(s);
 - v) Matrix-spiked sample(s);
 - vi) Control charts;
 - vii) Surrogate samples;
 - viii) Zero and span gases; and
 - ix) Reagent quality control checks.
- h. Preventive maintenance procedures and schedules;
- i. Corrective action (for laboratory problems); and
- j. Turnaround time.

C. Data Management Plan

The Permittee shall develop and initiate a Data Management Plan to document and track investigation data and results. This plan shall identify and set up data documentation materials and procedures, project file requirements, and project-related progress reporting procedures and documents. The plan shall also provide the format to be used to present the raw data and conclusions of the investigation.

1. Data Record

The data record shall include the following:

- a. Unique sample or field measurement code;
- b. Sampling or field measurement location and sample or measurement type;
- c. Sampling or field measurement raw data;
- d. Laboratory analysis ID number;

- e. Property or component measured; and
- f. Result of analysis (e.g., concentration).

2. Tabular Displays

The following data shall be presented in tabular displays:

- a. Unsorted (raw) data;
- b. Results for each medium, or for each constituent monitored;
- c. Data reduction for statistical analysis, as appropriate;
- d. Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and
- e. Summary data.

3. Graphical Displays

The following data shall be presented in graphical forms (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.):

- a. Display sampling location and sampling grid;
- b. Indicate boundaries of sampling area, and area where more data are required;
- c. Display geographical extent of contamination;
- d. Illustrate changes in concentration in relation to distances from the source, time, depth or other parameters; and
- e. Indicate features affecting intramedia transport and show potential receptors.

II. Facility Investigation (FI) Requirements

Facility Investigation:

The Permittee shall conduct those investigations necessary to: characterize the facility (Environmental Setting); define the source (Source Characterization); define the degree and extent of release of hazardous constituents (Contamination Characterization); and identify actual or potential receptors.

The investigations should result in data of adequate technical content and quality to support the development and evaluation of the corrective action plan if necessary. The information contained in a RCRA Part B permit application and/or RCRA Section 3019 Exposure Information Request may be referenced as appropriate.

All sampling and analyses shall be conducted in accordance with the Sampling and Analysis Plan. All sampling locations shall be documented in a log and identified on a detailed site map.

A. Environmental Setting

The Permittee shall collect information to supplement and/or verify Part B information on the environmental setting at the facility. The Permittee shall characterize the following as they relate to identified sources, pathways and areas of releases of hazardous constituents from Solid Waste Management Units.

1. Hydrogeology

The Permittee shall conduct a program to evaluate hydrogeologic conditions at the facility. This program shall provide the following information in principle of TEGD:

- a. A description of the regional and facility specific geologic and hydrogeologic characteristics affecting groundwater flow beneath the facility, including:
 - i) Regional and facility specific stratigraphy: description of strata including strike and dip, identification of stratigraphic contacts;
 - ii) Structural geology: description of local and regional structural features (e.g., folding, faulting, tilting, jointing, etc.);

- iii) Depositional history;
- iv) Regional and facility specific groundwater flow patterns; and
- v) Identification and characterization of areas and amounts of recharge and discharge.

b. An analysis of any topographic features that might influence the groundwater flow system.

c. Based on field data, tests, and cores, a representative and accurate classification and description of the hydrogeologic units which may be part of the migration pathways at the facility (i.e., the aquifers and any intervening saturated and unsaturated units), including:

- i) Hydraulic conductivity and porosity (total and effective);
- ii) Lithology, grain size, sorting, degree of cementation;
- iii) An interpretation of hydraulic interconnections between saturated zones; and
- iv) The attenuation capacity and mechanisms of the natural earth materials (e.g., ion exchange capacity, organic carbon content, mineral content, etc.).

d. Based on data obtained from groundwater monitoring wells and piezometers installed upgradient and downgradient of the potential contaminant source, a representative description of water level or fluid pressure monitoring including:

- i) Water-level contour and/or potentiometric maps;
- ii) Hydrologic cross sections showing vertical gradients;
- iii) The flow system, including the vertical and horizontal components of flow; and
- iv) Any temporal changes in hydraulic gradients, for example, due to tidal or seasonal influences.

- e. A description of man-made influences that may affect the hydrology of the site, identifying:
 - i) Local water-supply and production wells with an approximate schedule of pumping; and
 - ii) Man-made hydraulic structures (pipelines, french drains, ditches, etc.).

2. Soils

The Permittee shall conduct a program to characterize the soil and rock units above the water table in the vicinity of contaminant release(s). Such characterization may include, but not be limited to, the following types of information as appropriate:

- a. Surface soil distribution;
- b. Soil profile, including ASTM classification of soils;
- c. Transects of soil stratigraphy;
- d. Hydraulic conductivity (saturated and unsaturated);
- e. Relative permeability;
- f. Bulk density;
- g. Porosity;
- h. Soil sorptive capacity;
- i. Cation exchange capacity (CEC);
- j. Soil organic content;
- k. Soil pH;
- l. Particle size distribution;
- m. Depth of water table;
- n. Moisture content;
- o. Effect of stratification on unsaturated flow;
- p. Infiltration;
- q. Evapotranspiration;
- r. Storage capacity;
- s. Vertical flow rate; and
- t. Mineral content.

3. Surface Water and Sediment

The Permittee shall conduct a program to characterize the surface water bodies in the vicinity of the facility. Such characterization may include, but not be limited to, the following activities and information:

- a. Description of the temporal and permanent surface water bodies including:

- i) For lakes and estuaries: location, elevation, surface area, inflow, outflow, depth, temperature stratification, and volume;
- ii) For impoundments: location, elevation, surface area, depth, volume, freeboard, and construction and purpose;
- iii) For streams, ditches, and channels: location, elevation, flow, velocity, depth, width, seasonal fluctuations, flooding tendencies (i.e., 100 year event), discharge point(s), and general contents;
- iv) Drainage patterns; and
- v) Evapotranspiration.

b. Description of the chemistry of the natural surface water and sediments. This includes determining the pH, total dissolved solids, total suspended solids, biological oxygen demand, alkalinity, conductivity, dissolved oxygen profiles, nutrients (HO_2 , NO_2 , PO_2), chemical oxygen demand, total organic carbon, specific contaminant concentrations, etc.

c. Description of sediment characteristics including:

- i) Deposition area; -
- ii) Thickness profile; and
- iii) Physical and chemical parameters (e.g., grain size, density, organic carbon content, ion exchange capacity, pH, etc.)

4. Air

The Permittee shall provide information characterizing the climate in the vicinity of the facility. Such information may include, but not be limited to:

a. A description of the following parameters:

- i) Annual and monthly rainfall averages;
- ii) Monthly temperature averages and extremes;
- iii) Wind speed and direction;

- iv) Relative humidity/dew point;~
- v) Atmospheric pressure;
- vi) Evaporation data;
- vii) Development of inversions; and
- viii) Climate extremes that have been known to occur in the vicinity of the facility, including frequency of occurrence. (i.e., Hurricanes)

b. A description of topographic and man-made features which affect air flow and emission patterns, including:

- i) Ridges, hills or mountain areas;
- ii) Canyons or valleys;
- iii) Surface water bodies (e.g. rivers, lakes, bays, etc.); and
- iv) Buildings.

B. Source Characterization

For those sources from which releases of hazardous constituents have been detected the Permittee shall collect analytic data to completely characterize the wastes and the areas where wastes have been placed, to the degree that is possible without undue safety risks, including: type, quantity, physical form, disposition (contaminant or nature of deposits), and facility characteristics affecting release (e.g., facility security, and engineering barriers). This shall include quantification of the following specific characteristics, at each source area:

1. Unit/Disposal Area Characteristics:

- a. Location of unit/disposal area;
- b. Type of unit/disposal area;
- c. Design features;
- d. Operating practices (past and present);
- e. Period of operation;
- f. Age of unit/disposal area;
- g. General physical conditions; and
- h. Method used to close the unit/disposal area.

2. Waste Characteristics:

a. Type of wastes placed in the unit:

- i) Hazardous classification (e.g., flammable, reactive, corrosive, oxidizing or reducing agent);
- ii) Quantity; and
- iii) Chemical composition.

b. Physical and chemical characteristics such as:

- i) Physical form (solid, liquid, gas);
- ii) Physical description (e.g., powder, oily sludge);
- iii) Temperature;
- iv) pH;
- v) General chemical class (e.g., acid, base, solvent);
- vi) Molecular weight;
- vii) Density;
- viii) Boiling point;
- ix) Viscosity;
- x) Solubility in water;
- xi) Cohesiveness of the waste; and
- xii) Vapor pressure.

c. Migration and dispersal characteristics of the waste such as:

- i) Sorption capability;
- ii) Biodegradability, bioconcentration, biotransformation;

- iii) Photodegradation rates;
- iv) Hydrolysis rates; and
- v) Chemical transformations.

The Permittee shall document the procedures used in making the above determinations.

C. Characterization of Releases of Hazardous Constituents

The Permittee shall collect analytical data on groundwater, soils, surface water, sediment, and subsurface gas contamination in the vicinity of the facility in accordance with the sampling and analysis plan as required above. These data shall be sufficient to define the extent, origin, direction, and rate of movement of contamination. Data shall include time and location of sampling, media sampled, concentrations found, conditions during sampling, and the identity of the individuals performing the sampling and analysis. The Permittee shall address the following types of contamination at the facility:

1. Groundwater Contamination

The Permittee shall conduct a groundwater investigation to characterize any plumes of contamination detected at the facility. This investigation shall at a minimum provide the following information:

- a. A description of the horizontal and vertical extent of any plume(s) of hazardous constituents originating from the facility;
- b. The horizontal and vertical direction of contamination movement;
- c. The velocity of contaminant movement;
- d. The horizontal and vertical concentration profiles of hazardous constituents in the plume(s);
- e. An evaluation of factors influencing the plume movement; and
- f. An extrapolation of future contaminant movement.

The Permittee shall document the procedures used in making the above determinations (e.g., well design, well construction, geophysics, modeling, etc.).

2. Soil Contamination

The Permittee shall conduct an investigation to characterize the contamination of the soil and rock units above the saturated zone in the vicinity of any contaminant release. The investigation ~~may~~ include the following information:

- a. A description of the vertical and horizontal extent of contamination;
- b. A description of appropriate contaminant and soil chemical properties within the contaminant source area and plume. This may include contaminant solubility, speciation, adsorption, leachability, exchange capacity, biodegradability, hydrolysis, photolysis, oxidation and other factors that might affect contaminant migration and transformation;
- c. Specific contaminant concentrations;
- d. The velocity and direction of contamination movement; and
- e. An extrapolation of future contaminant movement.

The Permittee shall document the procedures used in making the above determinations.

3. Surface Water and Sediment Contamination

The Permittee shall conduct a surface water investigation to characterize contamination in surface water bodies resulting from releases of hazardous constituents at the facility.

The investigation may include, but not be limited to, the following information:

- a. A description of the horizontal and vertical extent of any plume(s) originating from the facility, and the extent of contamination in underlying sediments;
- b. The horizontal and vertical direction of contaminant movement;
- c. The contaminant velocity;

- d. An evaluation of the physical, biological and chemical factors influencing contaminant movement;
- e. An extrapolation of future contaminant movement; and
- f. A description of the chemistry of the contaminated surface waters and sediments. This includes determining the pH, total dissolved solids, specific contaminant concentrations, etc.

4. Air Contamination

The Permittee shall conduct an investigation to characterize gaseous releases of hazardous constituents into the atmosphere or any structures or buildings. This investigation may provide the following information:

- a. A description of the horizontal and vertical direction and velocity of contaminant movement;
- b. The rate and amount of the release; and
- c. The chemical and physical composition of the contaminant(s) released, including horizontal and vertical concentration profiles.

The Permittee shall document the procedures used in making the above determinations.

D. Potential Receptors

The Permittee shall collect data describing the human populations and environmental systems that are susceptible to contaminant exposure from the facility. Chemical analysis of biological samples and/or data on observable effects in ecosystems may also be obtained as appropriate. The following characteristics shall be identified:

- 1. Current local uses and planned future uses of groundwater:
 - a. Type of use (e.g., drinking water source: municipal or residential, agricultural, domestic/non-potable, and industrial); and
 - b. Location of groundwater users, to include withdrawal and discharge wells, within one mile of the impacted area.

The above information should also indicate the aquifer or hydrogeologic unit used and/or impacted for each time.

2. Current local uses and planned future uses of surface waters directly impacted by the facility:
 - a. Domestic and municipal (e.g., potable and lawn/gardening watering);
 - b. Recreational (e.g., swimming, fishing);
 - c. Agricultural;
 - d. Industrial; and
 - e. Environmental (e.g., fish and wildlife propagation).
3. Human use of or access to the facility and adjacent lands, including but not limited to:
 - a. Recreation;
 - b. Hunting;
 - c. Residential;
 - d. Commercial; and
 - e. Relationship between population locations and prevailing wind direction.
4. A general description of the biota in surface water bodies on, adjacent to, or affected by the facility.
5. A general description of the ecology within and adjacent to the facility.
6. A general demographic profile of the people who use or have access to the facility and adjacent land, including, but not limited to: age, sex, and sensitive subgroups.
7. A description of any known or documented endangered or threatened species near the facility.

APPENDIX C
Facility Submission Summaries

Facility Submission Summary for the SWMU's identified in Condition A.1.

Below is a summary of the planned reporting requirements for the SWMU's that require a RFI plan upon the signing of the agreement:

<u>Facility Submission Requirements</u>	<u>Due Date</u>
Workplan for SWMU(s) identified in Condition A.1.	thirty (30) days after the agreement is signed
Progress Reports on the plan	quarterly if more than 180 days
Draft Report	ninety (90) days after completion of remedial plan
Final Report	thirty (30) days after receipt of Department comments
Corrective Action Plan	As determined necessary by the Department.

The above reports must be signed and certified in accordance with R.61-79.270.11.

Facility Submission Summary for the SWMU's identified under Condition A.2.

Below is a summary of the planned reporting requirements for the SWMU's that are identified subsequent to the signing of the Agreement.

<u>Facility Submission Requirements</u>	<u>Due Date</u>
Notification of the SWMU(s)	fifteen (15) days after discovery
SWMU Facility Assessment plan for the "new" unit(s)	sixty (60) days after the notification above
Workplan for SWMU(s) identified subsequent to the permit issuance	ninety (90) days after the completion of the RFA
Progress Reports	Quarterly, beginning 90 days from implementation of plan*
Draft Report	ninety (90) days after completion
Final Report	thirty (30) days after DHEC comments on Draft Report
Corrective Action Plan**	As specified by the Department

* This applies to plans that are for more than 180 days.

** The Corrective Plan shall include any units listed under Condition A.2. for which corrective action is deemed necessary.



Freedom of Information Request Form

Customer Service: (803) 898-3882

Date: 8/29/2024

Internal request number: _____

Contact information

Name: Heather Jones Company/Organization: Cory Watson, P.C.
 Street address: 2131 Magnolia Avenue South City: Birmingham State: AL Zip Code: 35205
 Phone number: 205-271-7132 Email address: hjones@corywatson.com

Request information

I'm requesting: Specific documents File review

Facility or project name: _____

Facility address: _____

County: _____

DHEC file custodian/staff contact if known: _____

Description of documents or files requested:

All permits issued pursuant to the Resource Conservation and Recovery Act (RCRA) that are applicable to the following sites and entities:

Entity: Roebuck Disposal, LLC
 EPA Site Name: Roebuck Disposal LLC
 EPA Site ID: SCD981467616

Entity: Synthomer USA, LLC
 EPA Site Name: Synthomer USA LLC – Roebuck Site
 EPA Site ID: SCD003360393

Family Privacy Protection Act statement

The Family Privacy Protection Act, SC Code Section 30-2-50, prohibits any person or private entity from knowingly obtaining or using any personal information obtained from our agency for commercial solicitation directed to any person in the State. Violation of this law is a crime.

I have read and understand this statement. I am not requesting personal information for the purposes of commercial solicitation or in violation of law.

Signed: 

Submit requests: Email: foi@dhec.sc.gov • Fax: (803) 898-3816 • Mail: FOI Office, 2600 Bull St., Columbia, S.C. 29201

Office Use Only: Date completed: _____

Billing info: Research: Time: _____ Cost: _____

Description: _____

Services: Scan #: _____ WebX documents #: _____ Hard copies #: _____ CD duplication #: _____

Other: _____

Delivery options: Pick up Emailed Mailed Other: _____ Total charge: _____